

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/02941

| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC(7) : A61K 31/40; C07D 487/04<br>US CL : 514/411, 579<br>According to International Patent Classification (IPC) or to both national classification and IPC   |   |  |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
|---|---|--|--|--|-----------------------|--|---|---|---|---|--|---|-----|--|--|-----|---|--|--|-------|
| <b>B. FIELDS SEARCHED</b><br>Minimum documentation searched (classification system followed by classification symbols)<br>U.S. : 514/411, 579<br>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched<br>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)<br>Please See Continuation Sheet   |   |  |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b> <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>US 5,614,198A (KENNEDY et al) 25 March 1997 (25.03.1997), see especially column 2, lines 42-58; column 4, line 66 thru column 7, line 23.</td> <td>7-8, 10-11, 13</td> </tr> <tr> <td>X</td> <td>SANTOS-NETO et al. Guanylin and Its Lysine-Containing Analogue in the Isolate Perfused Rat Kidney: Interaction with Chymotrypsin Inhibitor. Pharmacology and Toxicology, 2003, Vol. 92, No. 3, pp. 114-120.</td> <td>13</td> </tr> <tr> <td>---</td> <td></td> <td>1-2, 5, 12</td> </tr> <tr> <td>Y</td> <td></td> <td></td> </tr> <tr> <td>X</td> <td>US 5,961,980 A (KENNEDY et al) 05 October 1999 (05.10.1999), column 3, lines 16-17; column 5, line 4 thru column 8, line 24.</td> <td>6, 13</td> </tr> </tbody> </table>  |   |  | Category *                             | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | X  | US 5,614,198A (KENNEDY et al) 25 March 1997 (25.03.1997), see especially column 2, lines 42-58; column 4, line 66 thru column 7, line 23. | 7-8, 10-11, 13  | X   | SANTOS-NETO et al. Guanylin and Its Lysine-Containing Analogue in the Isolate Perfused Rat Kidney: Interaction with Chymotrypsin Inhibitor. Pharmacology and Toxicology, 2003, Vol. 92, No. 3, pp. 114-120. | 13   | ---   |     | 1-2, 5, 12   | Y  |     |   | X  | US 5,961,980 A (KENNEDY et al) 05 October 1999 (05.10.1999), column 3, lines 16-17; column 5, line 4 thru column 8, line 24. | 6, 13 |
| Category *  | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.  |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
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| ---   |   | 1-2, 5, 12   |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
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| <input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.   |   |  |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
| <table border="1"> <thead> <tr> <th>Special categories of cited documents:</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T"</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"X"</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y"</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;"</td> <td>document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </tbody> </table> |   |  | Special categories of cited documents: |  |                       | "A" document defining the general state of the art which is not considered to be of particular relevance | "T"   | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention | "E" earlier application or patent published on or after the international filing date | "X"   | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone | "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art | "O" document referring to an oral disclosure, use, exhibition or other means | "&" | document member of the same patent family | "P" document published prior to the international filing date but later than the priority date claimed |  |       |
| Special categories of cited documents:  |   |  |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
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| "E" earlier application or patent published on or after the international filing date   | "X"   | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone   |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)   | "Y"   | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
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| "P" document published prior to the international filing date but later than the priority date claimed  |   |  |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
| Date of the actual completion of the international search<br>13 June 2005 (13.06.2005)  |   | Date of mailing of the international search report<br>05 MAY 2006  |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |
| Name and mailing address of the ISA/US<br>Mail Stop PCT, Attn: ISA/US<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria, Virginia 22313-1450<br>Facsimile No. (703) 305-3230   |   | Authorized officer<br>Brian Kwon <i>Mary Watson</i><br>Telephone No. 703-308-1231  |  |  |                       |  |   |   |   |   |  |   |     |  |  |     |   |  |  |       |

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## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
Claims 14-15 and 17 are not searched because they fail to further limit the subject matter of a previous claim: the composition claim of the claims 14-15 and 17 are dependent on the method claim of the claim 10.
3. ☒ Claims Nos.: 14,15 and 17  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐  
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(2)) (January 2004)

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Continuation of B. FIELDS SEARCHED Item 3:  
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